

REMARKS

In the Office Action, the Examiner rejected claims 34-47, all of which remain pending in the present patent application. In light of the following remarks, Applicant respectfully requests reconsideration and allowance of all pending claims.

Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 34, 37, 38, 41, 44, and 45 under 35 U.S.C. 102(b) as being anticipated by Linkous (U.S. Pat. 3,333,329). However, because the cited reference fails to disclose *all* of the features recited in the instant claims, Applicant respectfully traverses the rejections.

A *prima facie* case of anticipation under 35 U.S.C. § 102 requires a showing that each limitation of a claim is found in a single reference, practice, or device. *In re Donohue*, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985). Furthermore, when interpreting a claim during patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. *In re Hyatt*, 211 F.3d 1367, 1372, 54 U.S.P.Q.2d 1664, 1667 (Fed. Cir. 2000). However, the broadest reasonable interpretation of the claims must be consistent with the interpretation that those skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999).

Independent Claim 34 and the Claims Depending Therefrom

Independent claim 34 recites, *inter alia*:

- (a) inserting a first coil group for a first electrical phase via an insertion tool *into a stator core through a first end* thereof;
- (b) inserting a first coil group for a second electrical phase via the insertion tool *into the stator core through a second end* thereof opposite the first end;
- (c) inserting a first coil group for a third electrical phase via the insertion tool *into the stator core through the first end* thereof;
(Emphasis added.)

In the Office Action, the Examiner wrote that

In Figure 1, Linkous shows that each of the coil groups are inserted and extend from both a front end and a back end of the stator core ... [w]here each of the coil groups is inserted by the insertion tool through each of the front end and back end. Office Action, pg. 2-3.

However, contrary to the Examiner's assertion, the cited reference fails to teach inserting coil groups into the stator core through *alternating ends* thereof, as recited in the instant claims. While the Examiner is correct that Fig. 1 of the Linkous reference shows a coil group 10 with end turns extending from both sides of the stator core 13, nothing in the reference indicates from which side a given coil group was introduced, or inserted, into the stator core. The participle "inserting" in each step of the present claims is modified by both a plane through which the coil group first crosses, e.g. the first end, *and a direction of travel through the plane, i.e. into the stator core*. In contrast, the Linkous reference merely teaches coil groups which, at most, intersect planes at the front and back ends, but not from which direction the coil groups were introduced into the stator core. Indeed, the only information that the cited reference provides concerning the introduction of the coil groups into the stator core is that this is performed by a machine. See Linkous, col. 4, ll. 40. In short, the Linkous reference discloses nothing about the orientation and direction of travel the coil groups during the insertion step, let alone a pattern of alternating direction of travel or orientation. Thus, the cited reference fails to teach the steps of inserting coil groups into the stator core alternately through first and second ends thereof.

Secondly, the Linkous reference fails to teach inserting coil groups for a *second and third electrical phase*. Every winding recited by the Linkous reference is for a single phase machine. For example, Fig. 1 and Fig. 10 of Linkous both show a single pair of leads 48-49 between the power supply 21 and the winding 12. However, for an electric motor stator to operate under the power of a second or third electrical phase, the windings must connect to the power supply through three or more leads. Thus, the Linkous reference does not teach inserting coil groups with a sufficient number of connections to the power supply to support more than one electrical phase.

Furthermore, nothing in the cited reference even suggests that the coils within the coil groups have been or could be arranged within the stator core in a manner appropriate to the use of a second and third electrical phase. Therefore, the cited reference fails to teach a step of inserting a coil group for a second or third electrical phase.

Moreover, notwithstanding the Examiner's assertion that the "second and third electrical phases are recited as functional language that does not provide any manipulative difference to the claimed manufacturing method," the recitation of the instant claims that the coil groups are inserted for a second and third electrical phase is an affirmative recitation that cannot simply be read out of the claim. Office Action, pg. 3. The step of inserting a coil group for a first electrical phase is not interchangeable with a step of inserting a coil group for a second electrical phase because the component being inserted in one step is not identical to the component inserted in the other step. The arrangement and orientation of coils within a coil group are different in a coil group for a first electrical phase than in a coil group for a second or third electrical phase. Indeed, both the magnetic pole and the electrical phase for which a given coil group is inserted into the stator core govern the arrangement of coils within a coil group. By way of example, as illustrated in one embodiment of the present invention, the coils of a coil group inserted for a first pole of a first phase might be arranged such that some coils overlap both coils from a coil group inserted for a second pole of a second phase and coils from a coil group inserted for a first pole of third phase. Luttrell Application, Fig. 7. Simply put, the arrangement of coils within a coil group is a function of the electrical phase for which the coil group is inserted. Thus, a coil group with coils arranged for a second or third electrical phase is not interchangeable with a coil group with coils arranged for a first electrical phase. Accordingly, the step of inserting a coil group for second or third electrical phases is not identical to the step of inserting a coil group for a first electrical phase.

Therefore, because the cited reference fails to teach either inserting coil groups into the stator core through alternating ends thereof or inserting coil groups for second and third electrical phase, Applicant respectfully asserts that independent claim 34 and its respective dependent

claims 37 and 38 are not anticipated by the cited reference. With the foregoing in mind, Applicant respectfully requests reconsideration and allowance of the instant claims.

Independent Claim 41 and the Claims Depending Therefrom

Independent claim 41 recites, *inter alia*:

- (a) inserting a first coil group for a first electrical phase via an insertion tool into a stator core, leads of the first coil group exiting a first end of the stator core;
- (b) inserting a second coil group *for a second electrical phase* via the insertion tool into the stator core, leads of the second coil group exiting *a second end* of the stator core opposite the first end;
- (c) inserting a third coil group *for a third electrical phase* via the insertion tool into the stator core, leads of the third coil group exiting the first end of the stator core; (Emphasis added.)

The Linkous reference fails to disclose inserting coil groups with leads exiting *a second end* of the stator core. Every coil group taught by the Linkous reference has leads exiting only from a first side. While nothing in the Linkous specification text discloses from which side the leads to a given coil group exits the stator core, Fig. 1, 3, 5, 8, 10, and 12 of the Linkous reference all indicate that the leads of each coil group exit the stator core from the same side. Indeed, nothing in Linkous even suggests inserting a coil group with a lead exiting the stator core from a second side. Accordingly, the Linkous reference fails to teach inserting a coil group into the stator core with leads exiting a second end of the stator core, as recited in the instant claims.

Moreover, the Examiner's contention that "each coil group of Linkous includes multiple windings of individual leads 16" does not obviate the foregoing deficiency because the Examiner gives the word "lead" an unreasonably broad interpretation. The American Heritage Dictionary defines "lead" as a "conductor by which one circuit element is electrically connected to another." AMERICAN HERITAGE DICTIONARY, (Fourth Edition, 2000). One skilled in the art understands a coil group to be a circuit element, not merely a means to connect circuit elements. Thus, the

Examiner's assertion that a coil comprises one continuous lead is inconsistent with the plain meaning of the word "lead."

Secondly, as discussed above, the Linkous reference fails to teach inserting coil groups for *a second and third electrical phase*. The cited reference only discloses inserting coil groups for a first electrical phase. Every figure in the Linkous reference illustrates a winding connected to a power supply by only two leads. However, a three phase power supply requires sets of leads connecting to the windings. Thus, the device taught by Linkous lacks enough connections to the power supply to be powered by more than a single electrical phase. Indeed, nothing in the Linkous reference even suggests inserting coil groups configured for a second or third electrical phase. Accordingly, the cited reference fails to disclose the steps of inserting a coil group for a second and third electrical phase, as recited in claim 41.

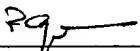
Therefore, because the cited reference fails to teach either inserting coil groups with leads exiting a second end of the stator core or inserting coil groups for a second and third electric phase, Applicant respectfully asserts that independent claim 41 and its respective dependent claims 37 and 38 are not anticipated by the cited reference. With the foregoing in mind, Applicant respectfully requests reconsideration and allowance of the instant claims.

Conclusion

In view of the remarks set forth above, Applicant respectfully requests allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: August 20, 2004



Patrick S. Yoder
Reg. No. 37,479
FLETCHER YODER
P.O. Box 692289
Houston, TX 77269-2289
(281) 970-4545

CORRESPONDENCE ADDRESS
ALLEN-BRADLEY COMPANY, LLC
Patent Department/704P Floor 8 T-29
1201 South Second Street
Milwaukee, Wisconsin 53204
Attention: Mr. Alexander Gerasimow
Phone: (414) 382-2000